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CHARLES J. BRAND, CHIEF

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## STANDARDS FOR MILLED RICE\*

PREPARED BY THE  
UNITED STATES DEPARTMENT OF AGRICULTURE  
AND ADOPTED BY THE  
UNITED STATES FOOD ADMINISTRATION

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\*These standards embody the recommendations of the United States Department of Agriculture but are not made effective at this time under the United States Grain Standards Act.

# STANDARDS FOR MILLED RICE

Prepared by the United States Department of Agriculture.

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For the purposes of the standards for milled rice:

SECTION 1. *Rice*.—Rice shall be grain of the genus *Oryza*, species *sativa*.

SEC. 2. *Milled rice*.—Milled rice shall be whole or broken kernels, grown in continental United States, from which the hulls, germs, and practically all of the bran layers have been removed, either coated or uncoated, and which shall contain not more than five per centum of finely broken particles of rice which will pass readily through a No.  $5\frac{1}{2}$  sieve, and not more than twenty per centum of seeds, paddy grains, and other foreign material either singly or in any combination.

SEC. 3. *Basis of determinations*.—Each determination of foreign material, paddy grains, and moisture shall be made on the basis of the grain including foreign material and paddy grains. Each determination of other rice or rices shall be made on the basis of the whole kernels only. All other determinations shall be made on the basis of the grain when free from foreign material and paddy grains.

SEC. 4. *Percentages*.—Percentages, except in the case of moisture, shall be percentages ascertained by weight.

SEC. 5. *Percentage of moisture*.—Percentage of moisture shall be that ascertained by the moisture tester and the method of use thereof described for corn in Circular No. 72, and supplement thereto, issued by the United States Department of Agriculture, Bureau of Plant Industry, except that the flask to be used shall be the double-walled flask described in United States Department of Agriculture Bulletin No. 56, or that ascertained by any device and method giving equivalent results.

SEC. 6. (a) *No.  $5\frac{1}{2}$  sieve*.—A metal sieve perforated with round holes  $5\frac{1}{2}$  sixty-fourths of an inch in diameter.

(b) *No. 6 sieve*.—A metal sieve perforated with round holes 6 sixty-fourths of an inch in diameter.

(c) *No.  $6\frac{1}{2}$  sieve*.—A metal sieve perforated with round holes  $6\frac{1}{2}$  sixty-fourths of an inch in diameter.

**SEC. 7. *Damaged kernels.***—Damaged kernels shall be kernels and pieces of kernels of milled rice which have been damaged by water, insects, or in any other manner, or which because of their abnormal growth are defective, including double kernels.

**SEC. 8. *Heat damaged kernels.***—Heat damaged kernels shall be kernels and pieces of kernels of milled rice which have been distinctly discolored by external heat or as a result of heating caused by fermentation.

**SEC. 9. *Paddy grains.***—Paddy grains shall be grains of rice from which the hulls have not been removed.

**SEC. 10. *Foreign material.***—Foreign material shall be any matter other than rice.

**SEC. 11. *Seeds.***—Seeds shall be whole or broken grains, kernels, or seeds of any plant other than rice.

**SEC. 12. *Whole kernels.***—Whole kernels shall be kernels of milled rice which are not split, and pieces of kernels which in length are equal to or greater than three-fourths of the length of an average perfect kernel of the lot represented.

**SEC. 13. *Broken kernels.***—Broken kernels shall be split kernels of milled rice, and pieces of kernels which are less than three-fourths of the length of an average perfect kernel of the lot represented.

**SEC. 14. *Chalky kernels.***—Chalky kernels shall be kernels and pieces of kernels of milled rice, one-half or more of the kernel or piece thereof resembling chalk in color and texture, including immature and frosted kernels and pieces of kernels.

#### **CLASSES OF MILLED RICE.**

**SEC. 15. Milled rice shall be divided into classes as follows:**

##### **CLASS I. HONDURAS.**

This class shall include rice of the long-grained varieties, including those known commercially as Honduras and Carolina, which contains more than twenty-five per centum of whole kernels and not more than one-half of one per centum of any other rice or rices.

##### **CLASS II. BLUE ROSE.**

This class shall include rice of the medium-grained varieties, including those known commercially as Blue Rose, Louisiana Pearl, and Early Prolific, which contains more than twenty-five per centum of whole kernels and not more than one-half of one per centum of any other rice or rices.

**CLASS III. JAPAN.**

This class shall include rice of the short-grained varieties, including those known commercially as Japan, which contains more than twenty-five per centum of whole kernels and not more than one-half of one per centum of other rice or rices.

**CLASS IV. HONDURAS SECOND HEAD.**

This class shall include rice of the long-grained varieties, including those known commercially as Honduras and Carolina, which contains not more than twenty-five per centum of whole kernels, not more than one-half of one per centum of any other rice or rices, not more than forty per centum of broken kernels which will pass readily through a No.  $6\frac{1}{2}$  sieve, and not more than ten per centum of broken kernels which will pass readily through a No. 6 sieve.

**CLASS V. SCREENINGS.**

This class shall include milled rice of any class or classes consisting of small pieces of kernels of which more than forty per centum will pass readily through a No.  $6\frac{1}{2}$  sieve or more than ten per centum will pass readily through a No. 6 sieve, and shall contain not more than twenty-five per centum of whole kernels.

**CLASS VI. MIXED.**

This class shall be any mixture of rice or rices not provided for in the classes from I to V inclusive.

**GRADE REQUIREMENTS.****HONDURAS MILLED RICE.**

**SEC. 16. *Grades for Honduras milled rice.***—The class Honduras shall be divided into five grades, the designations and requirements of which shall be as specified in this section.

No. 1 (Extra Fancy) Honduras—

- (a) shall be white or creamy and not opaque,
- (b) shall be flinty, but may contain not more than two-tenths of one per centum of chalky kernels,
- (c) shall contain ninety per centum or more of whole kernels, but may contain not more than two-tenths of one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than one seed in five hundred grams,
- (e) may contain not more than one paddy grain in five hundred grams,
- (f) may contain not more than one per centum of damaged kernels, and
- (g) may contain no heat damaged kernels.

## No. 2 (Fancy) Honduras—

- (a) shall be white or creamy and not opaque,
- (b) shall be flinty, but may contain not more than one per centum of chalky kernels,
- (c) shall contain eighty per centum or more of whole kernels, but may contain not more than five-tenths of one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than three seeds in five hundred grams,
- (e) may contain not more than three paddy grains in five hundred grams,
- (f) may contain not more than two per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than two entire kernels in five hundred grams.

## No. 3 (Choice) Honduras—

- (a) shall be white, creamy, or grayish and may be opaque,
- (b) shall be flinty, but may contain not more than five per centum of chalky kernels,
- (c) shall contain seventy per centum or more of whole kernels, but may contain not more than one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than seven seeds in five hundred grams,
- (e) may contain not more than seven paddy grains in five hundred grams,
- (f) may contain not more than three per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than six entire kernels in five hundred grams.

## No. 4 (Medium) Honduras—

- (a) may be any color except extremely red,
- (b) may be any texture, but may contain not more than fifteen per centum of chalky kernels,
- (c) shall contain sixty per centum or more of whole kernels, but may contain not more than one and five-tenths per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than sixteen seeds in five hundred grams,
- (e) may contain not more than twelve paddy grains in five hundred grams,
- (f) may contain not more than five per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than twelve entire kernels in five hundred grams.

## Sample Grade Honduras—

shall be milled rice of the class Honduras which does not come within the requirements of any of the grades from No. 1 to No. 4 inclusive, or which has any commercially objectionable foreign odor, or is musty or sour, or is heating, hot, infested with weevils or other insects injurious to stored rice, or is otherwise of distinctly low quality, or contains more than one-tenth of one per centum of foreign material excepting seeds, or contains more than fourteen and one-half per centum of moisture.

## BLUE ROSE MILLED RICE.

SEC. 17. *Grades for Blue Rose milled rice.*—The class Blue Rose shall be divided into four grades, the designations and requirements of which shall be as specified in this section.

## No. 1 (Fancy) Blue Rose—

- (a) shall be white, creamy, or grayish and may be opaque,
- (b) shall be flinty, but may contain not more than one per centum of chalky kernels,
- (c) shall contain ninety per centum or more of whole kernels, but may contain not more than five-tenths of one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than four seeds in five hundred grams,
- (e) may contain not more than four paddy grains in five hundred grams,
- (f) may contain not more than two and one-half per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than two entire kernels in five hundred grams.

## No. 2 (Choice) Blue Rose—

- (a) shall be white, creamy, or grayish and may be opaque,
- (b) shall be flinty, but may contain not more than five per centum of chalky kernels,
- (c) shall contain eighty per centum or more of whole kernels, but may contain not more than one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than twelve seeds in five hundred grams,
- (e) may contain not more than seven paddy grains in five hundred grams,
- (f) may contain not more than four per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than six entire kernels in five hundred grams.

## No. 3 (Medium) Blue Rose—

- (a) may be any color except extremely red,
- (b) may be any texture, but may contain not more than ten per centum of chalky kernels,
- (c) shall contain seventy per centum or more of whole kernels, but may contain not more than two per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than thirty-two seeds in five hundred grams,
- (e) may contain not more than twelve paddy grains in five hundred grams,
- (f) may contain not more than six per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than twelve entire kernels in five hundred grams.

## Sample Grade Blue Rose--

shall be milled rice of the class Blue Rose which does not come within the requirements of any of the grades from No. 1 to No. 3 inclusive, or which has any commercially objectionable foreign odor, or is musty

or sour, or is heating, hot, infested with weevils or other insects injurious to stored rice, or is otherwise of distinctly low quality, or contains more than one-tenth of one per centum of foreign material excepting seeds, or contains more than fourteen and one-half per centum of moisture.

**JAPAN MILLED RICE.**

**SEC. 18. *Grades for Japan milled rice.***—The class Japan shall be divided into four grades, the designations and requirements of which shall be as specified in this section.

**No. 1 (Fancy) Japan—**

- (a) shall be white, creamy, or grayish and not opaque,
- (b) shall be flinty, but may contain not more than three per centum of chalky kernels,
- (c) shall contain ninety per centum or more of whole kernels, but may contain not more than five-tenths of one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than four seeds in five hundred grams,
- (e) may contain not more than four paddy grains in five hundred grams,
- (f) may contain not more than three per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than two entire kernels in five hundred grams.

**No. 2 (Choice) Japan—**

- (a) shall be white, creamy, or grayish and may be opaque,
- (b) shall be flinty, but may contain not more than six per centum of chalky kernels,
- (c) shall contain eighty per centum or more of whole kernels, but may contain not more than one per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than twelve seeds in five hundred grams,
- (e) may contain not more than seven paddy grains in five hundred grams,
- (f) may contain not more than five per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than six entire kernels in five hundred grams.

**No. 3 (Medium) Japan—**

- (a) may be any color except extremely red,
- (b) may be any texture, but may contain not more than fifteen per centum of chalky kernels,
- (c) shall contain seventy per centum or more of whole kernels, but may contain not more than two per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than thirty-two seeds in five hundred grams,
- (e) may contain not more than twelve paddy grains in five hundred grams,
- (f) may contain not more than eight per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than twelve entire kernels in five hundred grams.

## Sample Grade Japan—

shall be milled rice of the class Japan which does not come within the requirements of any of the grades from No. 1 to No. 3 inclusive, or which has any commercially objectionable foreign odor, or is musty or sour, or is heating, hot, infested with weevils or other insects injurious to stored rice, or is otherwise of distinctly low quality, or contains more than one-tenth of one per centum of foreign material excepting seeds, or contains more than fourteen and one-half per centum of moisture.

## HONDURAS SECOND HEAD MILLED RICE.

SEC. 19. *Grades for Honduras Second Head milled rice.*—The class Honduras Second Head shall be divided into three grades, the designations and requirements of which shall be as specified in this section.

## No. 1 (Fancy) Honduras Second Head—

- (a) shall be white, creamy or grayish,
- (b) shall be flinty, but may contain not more than five per centum of chalky kernels,
- (c) shall contain not more than twenty-five per centum of broken kernels which will pass readily through a No.  $6\frac{1}{2}$  sieve, or not more than five per centum of broken kernels which will pass readily through a No. 6 sieve,
- (d) may contain not more than eight seeds in five hundred grams,
- (e) may contain not more than three paddy grains in five hundred grams,
- (f) may contain not more than two per centum of damaged kernels, and
- (g) may contain heat damaged kernels in a quantity equal to not more than ten entire kernels in five hundred grams.

## No. 2 (Choice) Honduras Second Head—

- (a) may be any color except extremely red,
- (b) may be any texture, but may contain not more than twenty per centum of chalky kernels,
- (c) may contain not more than thirty-two seeds in five hundred grams,
- (d) may contain not more than seven paddy grains in five hundred grams,
- (e) may contain not more than eight per centum of damaged kernels, and
- (f) may contain heat damaged kernels in a quantity equal to not more than fifty entire kernels in five hundred grams.

## Sample Grade Honduras Second Head—

shall be milled rice of the class Honduras Second Head which does not come within the requirements of grade No. 1 or No. 2, or which has any commercially objectionable foreign odor, or is musty or sour, or is heating, hot, infested with weevils or other insects injurious to stored rice, or is otherwise of distinctly low quality, or contains more than one-tenth of one per centum of foreign material excepting seeds, or contains more than fourteen and one-half per centum of moisture.

#### SCREENINGS MILLED RICE.

SEC. 20. *Grades for Screenings milled rice.*—The class Screenings shall be divided into three grades, the designations and requirements of which shall be as specified in this section.

No. 1 (Fancy) Screenings—

- (a) shall be white, creamy or grayish,
- (b) shall be flinty, but may contain not more than five per centum of chalky kernels,
- (c) shall contain not more than twenty per centum of broken kernels which will pass readily through a No. 6 sieve, or not more than five per centum of broken kernels which will pass readily through a No. 5½ sieve,
- (d) may contain not more than twelve seeds in five hundred grams, and
- (e) may contain not more than three paddy grains in five hundred grams,

No. 2 (Choice) Screenings—

- (a) may be any color except extremely red,
- (b) may be any texture, but may contain not more than twenty per centum of chalky kernels,
- (c) may contain not more than forty-eight seeds in five hundred grams, and
- (d) may contain not more than seven paddy grains in five hundred grams.

Sample Grade Screenings—

shall be milled rice of the class Screenings which does not come within the requirements of grade No. 1 or No. 2, or which has any commercially objectionable foreign odor, or is musty or sour, or is heating, hot, infested with weevils or other insects injurious to stored rice, or is otherwise of distinctly low quality, or contains more than one-tenth of one per centum of foreign material excepting seeds, or contains more than fourteen and one-half per centum of moisture.

#### MIXED MILLED RICE.

SEC. 21. *Grades for Mixed milled rice.*—Mixed milled rice shall be graded according to the grade requirements of the class of milled rice which predominates over each other class in the mixture; the grade designations of such rice shall include, successively in the order named, the number of the grade (to which may be added in parentheses the grade name such as "Extra Fancy," "Fancy," "Choice," etc.) or the words "Sample Grade," as the case may be, the word "Mixed," and in the order of its predominance, the name and approximate percentage of the whole kernels of each class of rice in the mixture.

STANDARDS FOR MILLED RICE.<sup>2</sup>

CLASS.	GRADE.	Number permitted in 500 grams.				Size separation.				Texture.				C O L O R.
		Damaged kernels.	Heated damaged kernels.	Paddy seeds.	Whole kernels.	Whole kernels.	No. 5½.	No. 6.	No. 6½.	Chalky kernels.	Chalky kernels.	Flinty.	Flinty.	
Honduras.....	No. 1 (Extra Fancy).....	1.0	None	1	1	90.0	0.2	0.5	1.0	0.2	1.0	Flinty.	Flinty.	White, creamy and not opaque.
	No. 2 (Fancy).....	2.0	2	3	3	80.0	0.5	1.0	1.5	0.5	5.0	Flinty.	Flinty.	White, creamy and not opaque.
	No. 3 (Choice).....	3.0	6	7	7	70.0	1.0	1.5	1.5	1.0	15.0	Flinty.	Flinty.	White, creamy, or grayish and may be opaque.
	No. 4 (Medium).....	5.0	12	16	12	60.0	1.5	1.5	1.5	1.5	15.0	Any texture..	Any texture..	Any color except extremely red.
Blue Rose.....	No. 1 (Fancy).....	2.5	2	4	4	90.0	0.5	1.0	1.5	1.0	1.0	Flinty.	Flinty.	White, creamy, or grayish and may be opaque.
	No. 2 (Choice).....	4.0	6	12	7	80.0	1.0	1.0	1.0	1.0	5.0	Flinty.	Flinty.	White, creamy, or grayish and may be opaque.
	No. 3 (Medium).....	6.0	12	32	12	70.0	2.0	2.0	2.0	2.0	10.0	Any texture..	Any texture..	Any color except extremely red.
Japan.....	No. 1 (Fancy).....	3.0	2	4	4	90.0	0.5	1.0	1.5	0.5	3.0	Flinty.	Flinty.	White, creamy, or grayish.
	No. 2 (Choice).....	5.0	6	12	7	80.0	1.0	1.0	1.0	1.0	6.0	Flinty.	Flinty.	White, creamy, or grayish and may be opaque.
	No. 3 (Medium).....	8.0	12	32	12	70.0	2.0	2.0	2.0	2.0	15.0	Any texture..	Any texture..	Any color except extremely red.
Honduras Second Head.....	No. 1 (Fancy).....	2.0	10	8	3	.....	.....	.....	.....	5.0	25.0	Flinty.	Flinty.	White, creamy, or grayish.
	No. 2 (Choice).....	8.0	50	32	7	.....	.....	.....	.....	10.0	40.0	Flinty.	Flinty.	White, creamy, or grayish.
Screenings.....	No. 1 (Fancy).....	.....	.....	12	3	.....	5.0	20.0	20.0	5.0	20.0	Flinty.	Flinty.	White, creamy, or grayish.
	No. 2 (Choice).....	.....	.....	48	7	.....	5.0	40.0	40.0	5.0	20.0	Flinty.	Flinty.	White, creamy, or grayish.
Mixed.....	Mixed milled rice shall be graded according to the grade requirements of the class of milled rice which predominates over each other class in the mixture; the grade designations of such rice shall include, successively in the order named, the number of the grade (to which may be added in parentheses the grade name such as "Extra Fancy," "Fancy," etc.) or the words "Sample grade," as the case may be, the word "Mixed," and in the order of its predominance, the name and approximate percentage of the whole kernels of each class of rice in the mixture.													

<sup>1</sup>Sample grade.—Shall be milled rice which does not come within the requirements of any of the other grades of the class to which it belongs, or which has any commercially objectionable foreign odor, or is musty or sour, or is infested with weevils or other insects injurious to stored rice, or is otherwise of distinctly low quality, or contains more than one-tenth of 1 per centum of foreign material excepting seeds, or contains more than 14½ per centum of moisture.

<sup>2</sup>The figures in the above tabulation in all cases, except whole kernels, indicate maximum limit. The figures for whole kernels indicate minimum limits.